Genus Melitaea

Fig. 91.—Neuration of the genus *Melitæa*.

Caterpillar.—The larvæ are cylindrical, armed in the mature form on each segment with comparatively short spines thickly covered with diverging hairs, or needle-shaped spines. They are known in some species to be gregarious in their early stages, and then to separate before maturity. They feed upon the *Scrophulariaceæ* upon *Castilleja*, *Diplopappus*, and other plants.

Chrysalis.—The chrysalis is pendant, rounded at the head, provided with more or less sharply pointed tubercles on the dorsal surface, and generally white or some shade of bright yellow blotched with brown or black, and marked with reddish or orange spots on the dorsal side.

This genus is very large and is distributed widely over all the colder portions of the north temperate zone. There are many species found in Europe, in Siberia, in China, and in the northern islands of Japan. On the upper slopes of the Himalayas it is also represented by a few species. In North America the genus is well represented, the most of the species being found upon the mountain-slopes and in the valleys of the Pacific coast region. Only two species occur in the Eastern States.

(1) Melitaea phaeton, Drury, Plate XVI, Fig. 1, ♂; Plate V, Figs. 15, 16, *chrysalis* (The Baltimore).

Butterfly, ♂.—The upper side is black, with a marginal row of red spots, followed by three rows of pale-yellow spots on the fore wings and two on the hind wings. Besides these there are some large red spots on the cells of both wings, a large red spot about the middle of the costa of the hind wing, and a few scattering yellow spots, forming an incomplete fourth row on the fore wing and an incomplete third row on the hind wing. On the under side all the spots of the upper side reappear, but heavier and more distinct, and on the hind wings there are

two additional rows of yellow spots, and a number of irregular patches of red and yellow at the base of both wings.

$.—The female is much like the male. Expanse, 5, 1.75-2.00 inches; ?, 2.00-2.60 inches.

Egg.—The egg which is outlined upon p. 4, Fig. 8, is brownish-yellow when first laid, then changes to crimson, and